THE QUIET REVOLUTION: HOW TECHNOLOGY IS CHANGING THE CIVIL SOCIETY LANDSCAPE IN CENTRAL AND EASTERN EUROPE AND EURASIA

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The use of technology in promoting civil society development and democratization has produced some attention-grabbing headlines and compelling news stories in recent years. The dynamic nature and accessibility of new technology provide citizens and NGOs with creative and innovative ways to communicate, collaborate, and participate in the governance process and civil society development.

Technological development moves fast. Facebook went from 1 million to 400 million users in five years. Twitter grew from about 2 million to 20 million users in a year. Internet usage has expanded significantly, for example, in Kazakhstan growing from about 3 percent of the population to nearly 34 percent between 2005 and 2009.[2] The use of Internet and mobile phones has become an indispensible element of life, rather than a rare pursuit of the elite. This is the change currently taking place in Central and Eastern Europe and Eurasia, where first basic Internet access and then social networking have transformed not only ways of communication but methods of governance and concepts of citizen participation. Civil society throughout the region has been a bit slower to recognize the value and new uses of these technologies, but dramatic events in Moldova and Iran in 2009, and the Kyrgyz Republic in spring 2010, have awoken NGOs and governments alike to the power of technology tools.[3]

Though intents, methods and results were mixed, the 2009 protests in Iran and Moldova first generated excitement in the public consciousness about how social media could be used for democracy campaigning in the developing world. In Iran, youth activists used mobile phones with cameras to post eyewitness accounts of post-election turmoil to YouTube, Twitter and Facebook that captivated the online world and gave firsthand insight onto how a repressive government was lashing out at protesters. A brief youth uprising in response to flawed elections in April in Moldova was quickly—and perhaps

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[2] For comparison, in the same period, Internet usage grew in Kyrgyzstan from 11 percent to 40 percent, in Russia from 15 percent to 42 percent, in Georgia from 6 percent to 30.5 percent, in the Czech Republic from 35 percent to 64 percent, in Bosnia from 21 percent to 38 percent, and in the United States from 68 percent to 76 percent. These figures are from the International Telecommunications Union and represent the percentage of the population which has used the Internet in the last twelve months. Mobile phone subscriptions have grown even faster. In 2005, 10 percent of the Kyrgyzstan population had mobile phones; in 2009, the number was 81 percent. In Northern Tier countries, there were well over 100 mobile subscriptions per 100 people in 2009.

[3] The results of Moldova's April 2009 parliamentary elections, which gave a majority of seats to the ruling Communist Party, were disputed and the country was wracked by significant unrest. After the parliament failed to elect a new president, new parliamentary elections were called in July, causing the Communist Party to lose its majority. Following Iran's June 2009 presidential election and its disputed results favoring incumbent Mahmoud Ahmadinejad, supporters of opposition candidate Mir Hossein Mousavi took to the streets in Tehran and other major cities. During April 2010 in Kyrgyzstan, anger at the state of the economy, rising utility prices, repressive government policy, and media censorship caused violent demonstrations to break out across the country, resulting in the ouster of President Kurmanbek Bakiyev and the creation of an interim government.

overenthusiastically—dubbed the "Twitter revolution" when some organizers posted updates and rally calls to the microblogging[4] service for the whole world to witness and follow.

While these events are only the latest examples of how the Internet has transformed citizen participation and organization, they underline the new ways civil society groups can take advantage of inexpensive and easy-to-use electronics coupled with rapidly increasing Internet bandwidth. Most significantly, the impact of these events on civil society development was that individual citizens who might otherwise have been powerless realized that new instruments for action were easily within their reach. Cell phone images, flash mobs, and videos played themselves out on CNN and in the *International Herald Tribune*, demonstrating how citizens' voices could be amplified on a national or international level through technology. These technologies can create shared national experiences—accelerating and broadening the audience for the relaying of critical information and enabling rapid, coordinated responses to specific events, such as a rigged election.

This democratization of information control is exhilarating, but there are also reasons to temper the excitement. In many countries covered by this Index, bandwidth and computing power are still limited and the use of technology for collaboration and rapid coordination have yet to catch on beyond a small elite in the capital. Technology has changed NGOs' capacities and impact, but often in less dramatic ways than those covered in the press. Many small organizations are still only learning to navigate the online world. From their starting position, the jump from traditional forms of communication to email is as monumental as and no less important than the transition for more mature organizations from email to social networks.

It is equally important to recognize that while technology can be used to disseminate information and enhance citizen participation, it can also be used for purposes of repression, censorship, and intimidation. During the Iran protests, for example, government agents used the same social networks to follow the coordination of activists, track rallies, and direct a response of repression. Bogus accounts disseminated false information to the same masses, obstructing organization and calling into question the trustworthiness of the network. Therein lies the key to the understanding of technology in development: very simply, technology is a tool that amplifies impact.

In many ways, the real technological revolution in the civil society sector has been much more subtle than the Iran and Moldova examples. The application of basic technology has played a major role in assisting NGOs to achieve fundamental goals and objectives, making them better communicators, more efficient organizers, and strengthening their connections to people. In this way, the sweeping application of new technology tools in the NGO community will continue to transform the ability of citizens to participate in the development of their communities on a tangible local level, and to change fundamentally the way that NGOs do business.

While events such as those in Iran and Moldova highlighted democratic activism specifically, many NGOs and other civil society actors in Central and Eastern Europe and the former Soviet Union have organized around themes that are not necessarily political in nature. Instead, many aim to provide useful services to the marginalized, such as improved education or promotion of women's rights or responsible social behavior. While social networking has recently captivated international imagination and stimulated innovation, technology applications for simple capacity development have proven equally important. Whether through public Internet access facilities or through their own equipment purchases, NGOs have begun to employ a new range of tools to increase their effectiveness: they use email to contact distant colleagues, spreadsheets for budgeting and accounting, Internet forum boards to generate discussion on

[4] Microblogging services like Twitter allow users to post brief (usually 140-character) bits of text or links, which appear as an ongoing feed of users' latest thoughts, updates and events.

critical issues, and Internet access to find newer and better information. This quiet revolution has fundamentally altered both internal and external organizational behaviors, and has accelerated NGOs' development by allowing quicker access to more diverse resources and audiences than had previously been possible.

This article will explore this quieter side of the intersection of technology and civil society, while also investigating the potential for new social networking technologies to accelerate change in the Europe and Eurasia regions. By surveying representative examples from different countries and NGOs with different missions, it will attempt to distill an understanding of how exactly technology is changing the civil society landscape, which tools have gained broad adoption, and which are just beginning to change the landscape.

HOW TECHNOLOGY IMPACTS NGOS WITHIN EUROPE AND EURASIA

In many ways, the civil society sector in Europe and Eurasia has not generated the spectacular stories demonstrating the triumph of technology as in South Asia, the Middle East, and Africa in recent years. There is no regional equivalent of Ushahidi (http://www.ushahidi.com/), the headline-grabbing, crisis-mapping tool that came out of the Kenyan post-election violence in early 2008 and was instrumental in directing the response to the recent Haiti earthquake. However, on a grassroots level, it is clear that there are several key areas where civil society has effectively mobilized the potential of technology, developing new technical acumen and capacity with each new technical advancement.[5]

While depending on their missions, organizations may start out using technology in different ways, there are roughly sequential tiers of sophistication from the most simple to the advanced in applying methods facilitated by newly available tools. First, there is the basic adoption of technology to gain access to information created by others and to simplify basic administrative tasks. Next, many organizations find they can use technology to better communicate with and engage stakeholders. The third tier is using technology to add innovative new activities that help NGOs achieve their missions by leveraging new tools to reach far wider audiences and process information in different ways than would have been previously possible.

First, and critically for a region with many small, local NGOs, technology has dramatically expanded **access to information**, in many cases providing a path to new sources of funding. Where NGOs may be dependent on foreign donors, as is the case in much of Eurasia, technology enables isolated, resource-starved NGOs to connect with those who can financially support their missions. For those in areas otherwise out of reach from the latest information, technology serves as an invaluable link to the world.

Next, many organizations have experienced how establishing a useful online presence can help them **better connect with their beneficiaries**. For example, among local organizations whose primary activity is service provision to a targeted population, effectiveness can be measurably increased with communication and presentation skills that enable them to target their message to beneficiaries and expand its reach to a broader audience, expanding their client base. More advanced organizations have

[5] This paper will use the term "technology" to mean "information and communication technologies" (ICTs). This term generally can be broken down in three ways: **hardware** such as computers, peripherals and mobile phones, **desktop applications** such as word processors and spreadsheets, and **Internet applications** such as browsers, Facebook, Twitter and cloud software (cloud computing is the growing trend of hosting applications and storing data on remote servers that can be accessed through the Internet, rather than on local media like a hard drive. The phenomenon allows users greater mobility and more reliable access, as the failure of a device does not mean that information is lost). The common thread between all these disparate items is that they are electronic means of facilitating *access to information* and *communication* between people and groups located at a distance.

graduated to interactive websites and text messaging that not only connect them to beneficiaries, but also **connect beneficiaries to each other**, placing an organization at the center of an issue-based community for advocacy and public awareness. Technology can help organizations encourage others to take action on a local or even national level. In some cases, this approach can provide new means of gathering funds. Northern Tier NGOs have begun to use mobile technology to expand and diversify their fundraising efforts.

Finally, technology enables **new forms of information collection, processing and dissemination** that were never before possible. For civil society organizations, this means efforts to monitor government and promote transparency can be enhanced measurably. Examples are understandably less frequent and have resulted in disappointment, particularly in the Eurasia region, where with the exception of a few courageous human rights groups, the severity of authoritarian governments in much of the region has to a large extent limited the ability of NGOs to use technology to facilitate reform or exert critical scrutiny and monitoring. In the Northern Tier, however, there have been some encouraging examples of the use of new technology to focus public attention on government.

In the following section, we will explore each of these steps in greater detail in order to gain an understanding of which tools are most commonly used and how each activity is approached across Central and Eastern Europe and Eurasia.

TECHNOLOGY EQUALIZES ACCESS TO CRITICAL INFORMATION

The most basic benefit of the Internet and mobile technology is the democratization of information. Among the areas where this has had the most impact is in access to funding sources among small organizations that have struggled to find funding for their projects.

NGOs in isolated and remote areas distant from the donor community struggle to identify funders. The Reproductive Health Center, an NGO in Tiraspol, Moldova, provides an example of how Internet access can make a considerable difference for local initiatives. Located in the Moldovan breakaway republic of Transnistria, Tiraspol and its NGO community are off the radar of most donors, forcing NGOs to be particularly creative in seeking funding sources. The Reproductive Health Center's staff of health educators raises public awareness on maternal and child health care and family planning, but had difficulty identifying funding for its outreach activities. Donor announcements often did not reach the NGO community in Tiraspol, or would only reach previous grantees. Members of the center's staff found training opportunities in computer and Internet use at a local public access center in mid-2009. Once they gained the skills to search online, they found a grant competition listed on the UNICEF website and applied. By October, UNICEF had awarded the center a grant to conduct a series of seminars on family planning at Tiraspol State University.

In rural Tajikistan, several agricultural NGOs—previously set up in part to bring grant funds to extension and training efforts—received training to use the Internet and subsequently installed connections in their offices. They discovered an immediate benefit in that they could provide new services to local farmers. At one of the Internet access sites, farmers frequented the office to type up mandatory government reports, saving them considerable time. Another NGO helped farmers in Vahdat, a small community just outside of Dushanbe, to find online information on common livestock diseases, helping them to diagnose problems and take preventive action. In the absence of veterinarians, the Internet helped farmers save their livestock and support their livelihoods.

This entry-level stage of engagement with technology is growing in the region and its significance should not be underestimated. Without access to the Internet, organizations such as those described above would be less able to provide their vital services. As institutional donors increasingly distribute their grant

information electronically and NGOs similarly learn to access it, the Internet helps strengthen civil society in isolated societies without easy access to the outside world. As more information becomes available online, even populations in remote areas gain quantifiable benefit from basic access.

TECHNOLOGY IMPROVES NGO OUTREACH TO STAKEHOLDERS

Technology helps organizations connect to their constituencies, provide better services, and create online communities for knowledge exchange. It is in this category that we have seen the most extensive use of and experimentation with new technologies. Some organizations in the region have discovered that by establishing an electronic presence, they are better able to target their activities and reach their primary beneficiaries. Other organizations have been able to get their messages out more efficiently, or connect with potential donors on a larger scale.

To date, in much of the region, social media tools have been underutilized by the civil society sector, but are gradually becoming increasingly prevalent. Slower technology uptake has meant that these networks have taken longer to reach a tipping point in which they become an integral part of social dialogue and may be tapped to reach vast audiences. In the meantime, more basic uses of the Internet cannot be discounted as means for reaching stakeholders.

In Tbilisi, Georgia, the Young Teachers and Psychologists Association (YTPA) works with children to communicate more effectively with their parents. In March 2009, the organization launched a basic website that lets visitors know about the services it offers. Within weeks, principals from four schools independently contacted the organization seeking training for their students. Shortly thereafter, five more schools signed up for the courses, and YTPA ultimately reached nearly 900 students through the initiative. Remarks by Executive Director Nana Chopliani underscore the motivation behind posting the information online. "We decided to develop a website since every serious organization in Tbilisi needs one," she says, "but honestly, we had no idea how much it would impact our NGO so soon after its creation." By opening a window to a broader audience and providing a mechanism to contact it, the technology transformed the impact of the organization.

Where Internet penetration among the public is higher, one finds more innovative uses of the Internet as a place for connecting beneficiaries with each other. GURT, a Ukrainian civil society support organization, received support from the Mott Foundation to pursue an evolving range of technologies to accomplish its mission—starting out with a basic email list of twenty people whose names were collected at a conference, and ultimately graduating to a 6,000-strong electronic bulletin list through which announcements are made about trainings, conferences, publications and grant opportunities. GURT is exemplary in the way its use of technology has expanded along with technology trends. Its website (http://gurt.org.ua/) started out as a static page featuring as its only content a picture of the organization's staff. It has now graduated to an interactive portal, where 2,500 registered members can post information about activities and exchange experiences. Instead of being a one-way source of information, the GURT portal now represents a community where civil society organizations from around the country participate in ongoing dialogue. Different NGOs use the site's blogging features to comment on ongoing campaigns and issues, and users can comment on news articles posted. Information is transmitted from sources much faster, and the lack of an organizational filter means that discussions about responses to problems can take place more organically.

In Romania, the mission of the Foundation to Support the Development of Civil Society (FSDC) is to support the work of colleague NGOs with training, meetings, research and information sharing. Recently, the organization realized that it had fallen behind the technology curve and its website was not reaching stakeholders effectively. "We were unsatisfied with the old database since we could not transform it into an e-platform," said Executive Director Ionut Sibian, describing how in 2008 the organization set out to

redevelop the site. After a strategic planning process identified the website as the organization's key means for providing news, information, and resources to Romanian NGOs, FSDC decided to focus on making the portal more interactive, transforming it from a simple information outreach tool to a knowledge-sharing destination. With a focus on usability, FSDC modeled the site on a popular Romanian news site. The new site was continuously updated with sector-relevant content and became a community of users. Registered NGOs could post their own news and event information while FSDC placed its own trainings, workshops, and resources online through live feeds, video content and a series of blogs. Today, the new interactive website at www.stiriong.ro receives over 50,000 hits per month and between 10,000 and 17,000 unique visitors. FSDC adds relevant content for NGOs on a daily basis and expects to offer live streaming for training events in the near future. Technology allowed FSDC to create an active participatory forum in place of simple information sharing—a dramatic example of how new communities form at the nexus between information and interaction.

Growing mobile phone usage also opens up new possibilities for connecting to those who might support an organization's mission. In the westernmost areas of Eastern Europe, text messaging has begun to be used as a direct fundraising tool. NGOs in Eastern Europe are just starting to take steps that make use of this promising new tactic. Some NGOs have begun to use tools such as the Donors Message Service (DMS), a portal in the Czech Republic that allows organizations to set up a "short code" number through which they can receive donations from mobile phone users by text message.[6] The project was developed as a partnership between the Czech Donors Forum and the Association of Cellular Networks Operators, initially to facilitate an annual Easter donation campaign called "Help the Children" of the Civil Society Development Foundation. The ongoing success of this campaign made donating to worthwhile charities easy and the service multiplied both the number of donors engaged in the issue and the total funds received. After its start in early 2004, it was made available to other organizations, and gained international recognition for serving as a platform for response to the Asian tsunami disaster in December 2004. The Czech branch of the Adventist Development and Relief Agency (ADRA) collected over $9 million from Czech mobile users in response to the Asian tsunami, representing nearly 1.5 million text messages. As NGOs began to rely on the service, several joined together to advocate successfully for removing VAT (value-added tax) from donation messages in 2006.

In Bulgaria, the national chapter of the Red Cross was one of the pioneers of SMS fundraising. Starting in 2004, the Bulgarian Red Cross used a short code SMS on the campaign **"**One SMS, one hot meal for one Bulgarian child," which ran for four weeks three times a year and continued for three years, collecting over $72,000 for the initiative. The campaign generated media coverage for the NGO and built longstanding linkages with municipalities throughout Bulgaria.

While these examples demonstrate the viability of text messaging as a fundraising tool, in much of the former Soviet Union, there remain significant barriers to widespread use of SMS for this purpose. These include banking regulations that do not provide for the transfer of funds through nontraditional means and lack of a legal or tax framework that would allow mobile telecoms to collect donations or NGOs to receive them.

Text messaging is also emerging as a cheap way to speed and multiply connections with large groups, though it takes some time for users to gain competence in using SMS effectively to connect with beneficiaries. In the Eurasia region, NGOs have recently begun experimenting with SMS to address limitations in connecting to those who demand their services. Dnipropetrovsk, Ukraine NGO Doroga Zhyttya's target group of tuberculosis and HIV/AIDS patients receive medication free of charge from the

[6] Users send a text message to a specific short code number (a phone number with fewer digits than normal phone numbers, making it easier to remember and associate with a particular initiative), and then the donation amount is added to their phone bill.

Ukrainian government, but the treatment is ineffective if patients do not adhere to a strict regimen of doses. Doroga Zhyttya was looking for ways to help its beneficiaries stick to their schedules, and became acquainted with the application FrontlineSMS. Initially developed for monitoring elections in Nigeria, FrontlineSMS allows structured sending and receiving of text messages using a laptop coupled with a single mobile phone. Doroga Zhyttya initially tested the technology in early 2009 with a group of twenty patients, sending out coded messages three times a day that discreetly reminded participants to take their medication. The experiment worked—participants expressed that they were more likely to remember their medication through this medium. An added benefit for participants was ongoing engagement with the NGO. Using FrontlineSMS, participants could respond with text messages asking for more information or assistance. After success with this pilot group, the NGO decided to expand the activity to 200 more clients.

Another Dnipropetrovsk NGO, the media resource center Tamarisk, picked up the text messaging technology to reach out to its target audience. Tamarisk regularly organizes trainings and roundtables on civic issues for NGOs and media representatives, but outreach was weak to those outside the city who have limited access to email. Tamarisk did, however, have a large contact list including mobile phone numbers gathered from previous events. The organization began using FrontlineSMS in spring 2009, blasting invitations to a large group of its participants. At the first event following adoption of the technology, 60 percent of attendees related that they had learned about the meeting by text message. Participants were enthusiastic about the ease with which they had received the information, and Tamarisk made further efforts to expand its phone number list.

These experiments with text messaging signal the growing awareness of the potential of this technology. While many throughout the region remain unconnected to the Internet, a growing majority have mobile phones. There is growing interest in and understanding of the technology, but obstacles remain. Sending text messages frequently can become expensive and to date, unlike in parts of Eastern Europe as mentioned above, mobile providers in Eurasia do not provide discounts for charitable messages.

ONLINE TOOLS FACILITATE ADVOCACY, PUBLIC AWARENESS, AND MOBILIZATION

In much of Eastern Europe and Eurasia, new forms of civic mobilization are slowly surfacing in a region where such activity has traditionally been difficult and encountered repression. Some organizations have demonstrated success in using new technology to generate public awareness about issues and press for change. This requires a more sophisticated understanding of how online and mobile tools can be used to foster decentralized communication among large groups.

Even basic Internet access can make a significant impact. In Kyrgyzstan, where travel and communications are difficult over mountainous terrain, in-person communication and coordination among groups is almost impossible. The League of Female Voters decided to use online discussion forums to help overcome this challenge when the group was organizing a campaign to legislate quotas for women members of parliament. A series of online discussions using a basic open source forum tool linked nearly thirty women leaders from six cities who otherwise would not have been able to communicate simultaneously. The activists discussed methods for collecting signatures on a petition for introducing amendments to the Election Code. A follow-up forum reviewed using local media to attract a wider audience for the effort. Though part of a larger campaign effort, the forums met the need of facilitating communication between multiple parties located far from each other. Following the discussions, more than 30,000 people signed the petition. In 2007, the Election Code was amended to require at least 30 percent of candidates on electoral lists for parliamentary elections to be female.

In Comrat, Moldova, graduates and community members of School No. 6 mobilized around a planned school closure for lack of funds. Upon learning of the plans to shutter the school in May 2009, a group of

Comrat residents registered an association, and then used a public access Internet center to create a wiki—an easily edited website that can be used as a common group space for planning and sharing resources—so that they could jointly strategize activities. They then created an email list and assembled a database of graduates both in Moldova and abroad, beginning a campaign to keep the school alive. By rallying this new network, group organizers were able to raise enough money to purchase electronics for the school, including a computer, printer, and digital camera. Following up on this success, the association then created an official website for the effort, using it to convey a sense of professionalism and legitimacy when reaching out to local businesses and the alumni group. By October, money had been raised to repair the school's roof, the installation of which was done by group members.

In more technologically advanced countries, social media has begun to be used for advocacy. The Russian blogosphere has gained respectable gravity and rallied democracy activists in a country where public protest is sometimes violently repressed. Roman Dobrokhotov, from the youth democratic movement "We" (http://www.wefree.ru), has been using Google Groups, a Live Journal blog (http://dobrokhotov.livejournal.com/) and the Russian social network Vkontakte to link together those interested in greater transparency and rule of law in the country. These online tools are dynamic, multifunctional and easy ways to facilitate collaboration between activists, helping both bring important issues to light and serving as the basis for planning and publicizing events. On his LiveJournal blog, Dobrokhotov keeps a running commentary on public issues and engages visitors in discussion through their comments. Dobrokhotov and his associates have organized numerous public demonstrations and have been arrested repeatedly.

Under repressive conditions, activists have devised creative ways to employ technology for public expression. In Russia, SMS and online forums are being used in organizing flash mobs, where young people come together seemingly suddenly in a public place, usually to make a political statement.[7] Though many of these gatherings have been broken up by police who have learned to monitor the websites, they represent one of the few remaining public forms of political opposition under an increasingly authoritarian Russian government. Still, the two sides play a cat-and-mouse game. In May 2010, organizers of a gay pride parade in Moscow used blogs and websites to mislead authorities seeking to stop the demonstration by providing false information about the time and location of their event. The organizers instead created a thirty-person flash mob that lasted for ten minutes on a main street. According to event organizer Nikolai Alekseev, "[f]or the first time in five years, the gay parade took place in Moscow without being arrested by the police and assaulted by protesters."[8]

Mobilization and the spreading of updated information are critical in times of crisis. The recent Kyrgyz revolution of April 7, 2010 underlines how during such events, a mix of different tools fills the need for urgent public information sharing, yet still does not serve as a catalyst for events themselves. With the most vibrant civil society environment and highest level of Internet penetration in Central Asia, Kyrgyzstan could be an indication of how civil society uses technology to mobilize around an urgent event, yet some have dubbed the events the "analog revolution" for the absence of any visible technology component which pundits could cite as evidence of the democratizing power of technology. The truth is a bit cloudier. In fact, individuals and organizations depended on a range of technologies—both traditional and cutting edge—for information and coordination. During the wild uncertainty of the first two days, the online forums at local Internet service provider Elcat were buzzing with information on the whereabouts of politicians, the status of the police, and the moving locations of groups of looters. Calls went out for "citizen patrollers" to guard important areas of the city from looting. Users packed Internet cafes and

[7] The term "flash mob" was first used in 2003 to describe an event in Manhattan organized by *Harper's Magazine* editor Bill Wasik.
[8] "Moscow Pride 'A Success,' Gay Activists Say," June 4, 2010, http://www.pinknews.co.uk/2010/06/04/moscow-pride-a-success-gay-activists-say/.

logged in from home. Reports came in from the regions as well. With the main television station first under strict government control and then looted, the best source of information became the Internet. Sources were unclear, but with such a mass of people checking the same few places online, reliable information was quickly identified and rose to the top, while rumors were frequently shot down. Eventual interim president Roza Otunbayeva was among those tweeting throughout the events. Even though events were perhaps not orchestrated online, many people stayed informed and aware during an extremely volatile period thanks to technology.

TECHNOLOGY PROVIDES NEW TOOLS TO COLLECT AND PROCESS INFORMATION FOR PUBLIC CONSUMPTION

At their most advanced, new technologies can be used to manage information in unprecedented ways. It takes longer periods of time and more advanced data manipulation skills to master these tools, but such experimentation is taking place in the region. Data about voting, public expenditures and government activities can be centralized and made available online—creating public information about topics that have more often in the region been hidden behind layers of bureaucracy.

In many ways, the ultimate success of civil society serving as a public watchdog depends not only on NGOs' efforts, but on the willingness of governments to be engaged or at the very least, to tolerate closer public scrutiny. Technology can provide a way to engage government constructively, opening dialogue and putting out public information for open discussion.

In Poltava, Ukraine, NGOs worked with the city government to increase the transparency of local government activities. By first conducting a joint public roundtable, NGOs and local government worked out a definition of which services should be provided on the city's website and which information should be available. Based on this discussion, the city council passed corresponding legislation and shortly thereafter began posting all government resolutions and important documents on the website. It also created space for commentary and discussion on the documents, as well as capabilities to send recommendations and inquiries to the relevant agencies. To ensure full access, the city installed a touch-screen kiosk in city hall through which residents could freely use the site.

Similarly, the Albanian youth movement Mjaft! (Enough!) works to raise awareness about corruption, crime, poverty, and government shortcomings in Albania. Though its staff consists of just thirty people, Mjaft! has 1,000 active volunteers, 10,000 members, and 500,000 subscribers to its news and information updates. This diffuse network is linked primarily by mobile devices and a Facebook page. In addition to organizing spontaneous events and demonstrations, Mjaft! uses SMS and multimedia messages to capture questionable activity by public officials, list parliamentary votes for public scrutiny, and record images of protests for distribution to subscribers and mainstream media outlets.

Montenegro's independence vote in 2006 inspired the region's largest text messaging for transparency initiative to date. The Center for Democratic Transition (CDT) set up a system to collect election monitoring reports on the hour from 200 observers posted around the country. These updates were automatically entered into a database, providing reliable real-time reporting on the progress of the referendum. These were coupled with hourly press conferences so that CDT could announce turnout figures as the day progressed, and it would become clear from a neutral viewpoint whether the required threshold of 50 percent voter turnout had been reached. When votes were counted, CDT monitors quickly texted in the results from their precincts. Shortly after voting concluded, CDT was able to project the actual result within a 2 percent margin of error.

The Fair Play Alliance in Slovakia has possibly taken the application of technology to transparency the farthest in the region. The alliance was formed to promote transparency in government by expanding

access to information, and specifically shedding light on and documenting how public money is transferred through contracts and subsidies to the private sector. Public officials go to great lengths to obscure their private commercial interests and relationships. To facilitate the effort to illuminate officials' finances, the NGO created a public online database that investigates the motives behind public contracts and political financing. The Fair Play Alliance credits its database with new laws on political party financing, after connections were made by journalists using the database between certain individuals and procurement results. The NGO now aims for politicians to voluntarily disclose their assets on the database.

THE EFFECT OF TECHNOLOGY ON NGOS SO FAR

Though momentum is gathering and some of the results recounted above are encouraging, less innovation in applying technology has come out of Central and Eastern Europe and Eurasia than perhaps in other regions. Throughout Africa, South Asia and Latin America, NGOs have capitalized on the penetration of mobile phones to spread information, promote transparency, monitor crises and plan responses, and interact more richly with stakeholders. Ushahidi, which has gained considerable acclaim over the last year, was initiated in Kenya and employed recently in Haiti. The Question Box (http://questionbox.org/) was developed in India as a tool to give the illiterate in rural India access to the wealth of information on the Internet and has since been expanded to Uganda. The open source tool FrontlineSMS helped to mobilize and coordinate thousands of monitors for Nigerian and Mexican elections.

Meanwhile, throughout Central and Eastern Europe and Eurasia—except perhaps at the region's western extreme— such stories of creativity are largely absent. That does not mean that new technologies have not been useful to NGOs in their work. But to date, the same access and technology is mainly being used to make more traditional activities and initiatives more efficient, rather than creating new paradigms and relationships.

It is also important to recognize that while NGOs have capitalized to some extent on the opportunities presented by computers, mobile phones, and the Internet, technology's effect on civil society has not been limited to those who belong to officially registered NGOs. In situations that call most for rapid organization, interestingly, it has been individuals who have been quickest to act. This trend was witnessed prominently in the events in Moldova in 2009 that were prematurely named the "Twitter revolution," as well as in the events in Kyrgyzstan in April 2010. In both cases, no NGOs seized the moment to activate their networks. Instead, in Moldova, a few genuinely concerned activists emailed their friends about gathering on Chisinau's main square, and the communication multiplied outward through many different means, from word of mouth to the Internet, including some mentions on Twitter. While Twitter was in no way the organizing tool, it was used as one tool among several in conveying events in real time. Likewise, in Kyrgyzstan, individuals were gathering and posting information online and started the call for volunteer defense groups, rather than established organizations taking the lead.

As with technology itself, NGOs' uses of new tools are evolving rapidly. In a region where information has traditionally been difficult to find, the Internet has clearly made important information more accessible and linked those who otherwise would never have collaborated. The significance of basic computer and Internet access cannot be underestimated. The more widespread both shared and private Internet access becomes, greater segments of the community gain the ability to participate in and gain from an information society. Service providers can rely on connecting with their beneficiaries, distributing information, and issuing calls for activism using inexpensive online tools rather than through expensive printing and travel.

Fully maximizing the use of technology will take time. While there are some impressive examples of mobilization through the use of technology, the trend has been relatively slow to develop. Mobile

technology is just beginning to shift the ways organizations contact and engage with their stakeholders, and this practice will only grow as mobile penetration multiplies. The technologies touched on in this survey have drastically lowered the barriers to sharing information and collaborating online. And while this may not always produce the same provocative news story that a Twitter-incited revolution might, the consequence is just as great: technology has fundamentally and unalterably changed the way that the civil society sector can carry out its work.